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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/676,480

09/30/2003

Ali-Reza Adl-Tabatabai

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06/08/2006

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EXAMINER

KROFCHECK, MICHAEL C

ART UNIT

PAPER NUMBER

2186

DATE MAILED: 06/08/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/676,480

Applicant(s)

ADL-TABATABAI ET AL.

Examiner

Michael Krofcheck

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2186

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 2 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 April 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☒ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1, 3, 5, 7-25, 27-38, 40-42, 44, 45 and 47 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1, 3, 5, 7, 8, 10-25, 27-38, 42, 44, 45 and 47 is/are allowed.
- 6) ☐ Claim(s) _____ is/are rejected.
- 7) ☒ Claim(s) 9, 40 and 41 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

1. This office action is in response to the RCE filed on 4/17/2006, entering the after final amendment filed on 3/27/2006.
2. Claims 1,5, 8, 9, 23, 28-29, 41-42, 44-45 have been amended.
3. The objections/rejections from the prior correspondence not restated herein have been withdrawn.
4. This application is in condition for allowance except for the following formal matters:

Claim Objections

5. Claims 9, 40-41 are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim.

The test for a proper dependent claim is whether the dependent claim includes every limitation of the parent claim. The test is not whether the claims differ in scope. A proper dependent claim shall not conceivably be infringed by anything which would not also infringe the basic claim.

The parent claims (1 and 35) of claims 9 and 40-41 state that the companion encoding bits are disregarded if the cache line is compressed. If the cache line is compressed and the respective bits are disregarded, then they cannot be used to encode the ordering of companion lines, or select the compression algorithm because they are being disregarded, i.e. it is like the bits are not there. This discrepancy causes

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claims 9, and 40-41 to fail the infringement test (MPEP § 608.01(n), "Infringement Test").

The applicant may wish to use language similar to that as in claims 12 and 28, which says that *tag comparison logic* ignores the companion encoding bits if the cache line is compressed, in the independent claims where disregarding the companion encoding bits is mentioned to clarify that the respective bits are not completely ignored to the extent that they do not exist, but only ignored relative to the tag comparison logic.

Allowable Subject Matter

6. Claims 1,3,5,7,8,10-25,27-38,42,44,45 and 47 are allowed.
7. The indicated allowability of claim 40 is withdrawn in view of the above objection.
8. Claims 9, 40-41 would be allowable if rewritten to overcome the objection(s), set forth in this Office action.

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Dye, et al., US patent 6523102 teaches of ignoring lower address bits based on the size of the page being cached.
10. Prosecution on the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.
11. A shortened statutory period for reply to this action is set to expire **TWO MONTHS** from the mailing date of this letter.

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12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael C. Krofcheck whose telephone number is 571-272-8193. The examiner can normally be reached on Monday - Friday.

13. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matt Kim can be reached on 571-272-4182. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

14. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Michael C. Krofcheck



MATTHEW KIM
SUPERVISORY PATENT EXAMINER
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